

EXHIBIT D

EXHIBIT D: Defendants' Intrinsic and Extrinsic Support
P.R. 4-3 Joint Claim Construction and Prehearing Statement

Claim Term	Defendants' Claim Construction	Intrinsic and Extrinsic Support
between the client computer and the target computer	extending from the client computer to the target computer	<p>Between, Merriam-Webster.com,</p> <p>http://www.merriamwebster.com/dictionary/between</p> <p>'135 Patent: Abstract, figs. 25-27, cols. 1:15-45, 7:59-8:15, 14:59-15:12, 16:16-55, 18:30-44, 24:7-17, 26:47-56, 33:17-25, 33:53-64, 34:54-35:3, 37:17-40:13, claims 1, 4-7, 10, 11, 12, 13.</p>
between the client computer and the secure target computer	extending from the client computer to the secure target computer	
between the client computer and the secure web computer	extending from the client computer to the secure web computer	
between the client computer and the secure server	extending from the client to a second computer	
between the client and a second computer	extending from the client computer to the secure server	
between the client the secure server	extending from the first location to the second location	
between the first location and the second location	extending from a first location to a second location	
between a first location and a second location	extending from the first computer to a second computer	
between the first computer and a second computer		

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'135 Patent '151 Patent '504 Patent '211 Patent '759 Patent		
domain name '135 Patent '151 Patent '180 Patent '504 Patent '211 Patent	a hierarchical sequence of words in decreasing order of specificity that corresponds to a numerical IP address	<p>'135 Patent cols. 37:22-29, 27:40-49. '151 Patent cols. 35:61-67. '180 Patent cols. 39:45-52, 39:63-40:5, 53:26-40. '504 Patent cols. 39:7-13, 39:24-33, 52:32-45. '211 Patent cols. 30:58-64, 39:8-17, 52:22-36. U.S. Patent No. 8,051,181 ('181 patent): claims 1-29, office actions and responses, see e.g. Response and Request for Reconsideration dated June 07, 2011 at 6 and Response dated October 08, 2010 at 9.</p> <p>Webster's New World Dictionary of Computer Terms (8th ed. 2000) (Domain Name), CisVir01181809.</p> <p>Microsoft Computer Dictionary (4th ed. 1999) (Domain Name), CisVir01181786.</p> <p>Random House Webster's Computer & Internet Dictionary (3rd ed. 1999) (Domain Name), CisVir01181794-95.</p> <p>Random House Webster's Computer & Internet Dictionary (3rd ed. 1999) (DNS), CisVir01181793.</p> <p>Webster's New World Dictionary of Computer Terms (8th ed. 2000) (DNS Server), CisVir01181808.</p>

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		<p>Webster's New World Dictionary of Computer Terms (7th ed. 1999) (Domain Name), CisVir01181802.</p> <p>Microsoft Computer Dictionary (4th ed. 1999) (DNS), CisVir01181785.</p> <p>Microsoft Computer Dictionary (4th ed. 1999) (Domain Name Address) , CisVir01181786.</p> <p>Webster's New World Dictionary of Computer Terms (8th ed. 2000) (IP Address), CisVir01181810.</p> <p>Webster's New World Dictionary of Computer Terms (7th ed. 1999) (IP Address), CisVir01181803.</p> <p>Microsoft Computer Dictionary (4th ed. 1999) (IP Address), CisVir01181787.</p> <p>Network Working Group, Request for Comments: 1035, Domain Names – Implementation and Specification (1987) , DEF047412.</p> <p>Network Working Group, Request for Comments: 920, Domain Requirements (1984), DEF047351.</p>
<p>Domain Name Service (DNS)</p> <p>'135 Patent</p> <p>'180 Patent</p>	<p>a lookup service that returns an IP address for a requested domain name to the requester</p>	<p>'135 Patent, Abstract, figs. 25-27, cols. 37:17-40:13, office actions and responses dated June 13, 2002 and March 13, 2002.</p>

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'504 Patent '211 Patent		
domain name service system '504 '211	a DNS that is capable of differentiating between, and responding to, both standard and secure top-level domain names	<p>'504 Patent, Abstract, cols. 6:21-7:40, 39:1-41:60, 49:1-53:9, figs. 33-35, claims 1-5, 7, 8, 14-17, 19-27, 33, 35, 36-39, 41, 48-51, 57, 59, 60, office actions and responses dated March 21, 2007 and July 11, 2007, notice of allowance dated April 10, 2008.</p> <p>'211 Patent, Abstract, figs. 33-35, cols. 6:17-7:37, 38:52-41:44, 48:55-52:67, claims 1-5, 7, 8, 14-17, 19-27, 33, 35, 36-39, 41, 48-51, 57, 59, 60, office actions and responses dated March 19, 2010, June 28, 2010, August 6, 2010, October 21, 2010, December 22, 2010.</p> <p>'181 patent: claims 1-29, office actions and responses, see e.g. Response and Request for Reconsideration dated June 07, 2011 at 6 and Response dated October 08, 2010 at 9.</p>
secure communication link¹ '504 '211 '759	virtual private network communication link	<p>'504 Patent, figs. 27, 33-35, cols. 1:33-54, 6:11-13, 6:36-7:10, 7:17-40, 21:50-55, 24:67-25:2, 49:1-52:45, claims 1, 9, 10, 16-18, 22, 24, 26-29, 33, 35, 36, 40-42, 46, 48, 50-53, 57, 59, 60, office actions and responses dated October, 1, 2003, May 18, 2004, March 21, 2007, May 11, 2007, July 11, 2000 and October 29, 2007</p> <p>'211 Patent, figs. 27, 33-35, cols. 1:29-63, 6:7-9, 6:17-37, 21:43-48, 24:60-62, 38:52-41:44, 48:55-52:67, claims 1, 9, 10, 16-18, 22, 24, 26-29, 33, 35, 36, 40-42, 46, 48, 50-53, 57, 59, 60, office actions</p>

¹ This claim term appears in different contexts in the '504 and '211 Patents than in the '759 Patent, where it was previously considered in the VirnetX v. Microsoft case.

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		<p>and responses dated March 19, 2010, June 28, 2010, August 6, 2010, October 21, 2010, December 22, 2010.</p> <p>'759 Patent, figs. 27, 34, cols. 1:27-48, 6:12-14, 6:37-7:12, 22:15-19, 25:39-41, 50:50-51:11, 3:38-42, 53:48-55, claims 1 and 16.</p> <p>'181 patent: claims 1-29, office actions and responses, see e.g. Response and Request for Reconsideration dated June 07, 2011 at 6-8.</p> <p>Claim Construction Opinion from the Microsoft Case (6:07-cv-80, D.I. 246) at 18-19 and 28-29.</p> <p>VirnetX's Opening Brief in Support of its Constructions of Claims from the Microsoft Case (6:07-cv-80, D.I. 194) at 18, 31-32.</p>
<p>virtual private network²</p> <p>'135 Patent</p> <p>'180 Patent</p> <p>'759 Patent</p>	<p>a network of computers which privately and directly communicate with each other by encrypting traffic on insecure communication paths between the computers where the communication is both secure and anonymous</p>	<p>'135 Patent, abstract, figs. 25-27, 31, cols. 1:15-45, 2:66-3:17, 5:49-6:10, 14:40-58, 19:5-24, 19:66-20:3, 20:12-21:40, 22:61-24:7, 23:11-36, 29:30-30:11, 30:60-68, 32:29-42, 37:17-40:13, 40:49-42:14, 44:14-45:61, office actions and responses dated June 13, 2002, March 13, 2002, and April 15, 2010, Nieh Declaration, claims 1-13.</p> <p>'180 Patent cols. 1:28-49, 21:8-27, 22:2-6, 25:15-40, Nieh Declaration, response of April 19 at 11-13.</p> <p>'759 Patent at 1:27-48, 21:21-40, 22:15-19, 25:27-53, 40:38-55, 40:66-41:18.</p>

² The meaning and scope of this claim term were materially altered by VirnetX during reexamination following the VirnetX v. Microsoft trial.

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		<p>'151 office actions, responses, and other communications dated June 24, 2004, September 17, 2004, October 18, 2005, January 6, 2006, March 28, 2006, July 27, 2006, October 30, 2006, March 30, 2007, June 15, 2007, December 13, 2007, January 1, 2008 (NOA), and April 11, 2008.</p> <p>'181 patent: claims 1-29, office actions and responses, see e.g. Response and Request for Reconsideration dated June 07, 2011 at 6-8.</p> <p>VirnetX's Opening Brief in Support of its Constructions of Claims from the Microsoft Case (6:07-cv-80, D.I. 194) at 6.</p> <p>Claim Construction Opinion from the Microsoft Case (6:07-cv-80, D.I. 246) at 8-9.</p> <p>Pretrial Hearing from the Microsoft Case (6:07-cv-80, D.I. 339) at 6:16-14:16.</p> <p>Microsoft Computer Dictionary (4th ed. 1999) (Module),</p> <p>CisVir01181788-89.</p>
'135 Patent		

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DNS proxy server	a computer or program that responds to a domain name inquiry in place of a DNS, and prevents destination servers from determining the identity of the entity sending the domain name inquiry	<p>'135 patent, Abstract, figs. 25-27, cols. 1:15-65, 5:65-6:10, 32:29-43, 37:17-40:13, claims 1-12, office actions and responses dated June 13, 2002, and March 13, 2002.</p> <p>'151 office actions, responses, and other communications dated June 24, 2004, September 17, 2004, October 18, 2005, January 6, 2006, March 28, 2006, July 27, 2006, October 30, 2006, March 30, 2007, June 15, 2007, December 13, 2007, January 1, 2008 (NOA), and April 11, 2008.</p> <p>Webster's New World Dictionary of Computer Terms (8th ed. 2000) (Proxy Server), CisVir01181812.</p> <p>Webster's New World Dictionary of Computer Terms (8th ed. 2000) (Proxy Server), CisVir01181812.</p>
generating from the client computer a Domain Name Service (DNS) request	creating and transmitting from the client computer a DNS request creating and transmitting from the client computer a DNS request	'135 patent, Abstract, figs. 25-27, cols. 37:17-40:13, claim 1.
secure target web site	a secure web site on the target computer	<p>'135 patent, Abstract, figs. 25-27, cols. 19:66-20:3, 37:17-40:13, 47:29-32, 48:16-19, claim 1, office actions and responses dated June 13, 2002, and March 13, 2002.</p> <p>Claim Construction Opinion from the Microsoft Case (6:07-cv-80, D.I. 246) at 18-19 and 28-29.</p>
secure web site	a web site that requires authorization for access and that can communicate	'135 Patent cols. 37:63-38:13, 47:20-22, 47:29-32, 48:3-5, 48:16-19, claims 1 and 10.

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Claim Term	Defendants' Claim Construction	Intrinsic and Extrinsic Support
	in a VPN	Claim Construction Opinion from the Microsoft Case (6:07-cv-80, D.I. 246) at 18-19.
target computer	the ultimate destination with which the client computer seeks to communicate	'135 patent, Abstract, fig. 25-27, cols. 1:65-2:24, 2:25-36, 37:17-40:13, 40:49-52, 42:40-43:13, office actions and responses dated June 13, 2002, and March 13, 2002, claim 1.
virtual private link	a communication pathway that permits computers to privately communicate with each other by encrypting traffic on insecure communication paths between the computers and accomplishes data security and anonymity through the use of hop tables	<p>'135 Patent, abstract, fig. 31, cols. 1:15-37, 5:49-64, 9:11-19, 23:11-36, 37:17-40:13, 39:21-33, 39: 42-40:13, 40:49-41:16, 41:49-55, 41:56-65, 44:14-47:18, claims 1, 10, 13, Nieh Decl. ¶¶ 9-29, office actions and responses of April 15, 2010, June 13, 2002.</p> <p>'180 Patent, Nieh Decl. ¶¶ 14-21, 25-29, office action response of April 19, at 11-13.</p> <p>Claim Construction Opinion from the Microsoft Case (6:07-cv-80, D.I. 246) at 8-9.</p> <p>Pretrial Hearing Transcript from the Microsoft Case (6:07-cv-80, D.I. 339) at 6:16-14:16.</p> <p>Random House Webster's Computer & Internet Dictionary (3rd ed. 1999) (Link), CisVir01181796-97.</p>
web site	one or more related web pages at a	'135 Patent at 37:25-45, 39:48-55, 40:1-38 47:28-30, 48:10-14.

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	location on the World Wide Web	Claim Construction Opinion from the Microsoft Case (6:07-cv-80, D.I. 246) at 15-17.
'151 Patent		
secure server	a server that requires authorization for access and communicates in a VPN	<p>'151 Patent, fig. 27, cols. 1:27-48, 6:7-9, 19:43-48, 40:18-35.</p> <p>'180 Patent, fig. 27, cols. 1:28-49, 6:12-14, 22:2-6, 50:19-48, 52:27-30, 52:55-56, 53:20-25.</p> <p>'181 patent: claims 1-29, office actions and responses, see e.g. Response and Request for Reconsideration dated June 07, 2011 at 6-8.</p> <p>Claim Construction Opinion from the Microsoft Case (6:07-cv-80, D.I. 246) at 18-19, 28-29.</p> <p>VirnetX's Opening Brief in Support of its Constructions of Claims from the Microsoft Case (6:07-cv-80, D.I. 194) at 31-32.</p>
secure web computer	<i>indefinite or</i> the target computer that hosts the secure web site	<p>'151 patent, Abstract, figs. 25-27, cols. 36:55-39:46.</p> <p>'135 patent, claim 10.</p>
'180 Patent		

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secure domain name service³	a non-standard lookup service that requires authorization for access, recognizes that a query message is requesting a secure computer address, and performs its services accordingly by returning a secure network address for a requested secure domain name	<p>'180 Patent, cols. 7:19-42, 39:45-52, 51:16-45, 53:26-40, Nieh Decl. ¶¶ 12-13, 23-24, 30-69, Response of April 19, at 5-8, 9-11, 14-18, 20-24, 25-27, 29-31, 33, Action Closing Prosecution of Jun. 16, 2010.</p> <p>'181 patent: claims 1-29, office actions and responses, see e.g. Response and Request for Reconsideration dated June 07, 2011 at 6 and Response dated October 08, 2010 at 9.</p>
'504 Patent		
an indication that the domain name service system supports establishing a secure communication link	a visible message or signal that informs the user that the domain name service system supports establishing a secure communication link	<p>'504 Patent, Abstract, figs. 33-35, cols. 49:1-53:9, claims 1, 17, 24, 36, 41, 48, 60, office action and amendments of March 21, 2007 and July 11, 2007.</p> <p>Indication, Merriam-Webster.com, <u>http://www.merriam-webster.com/dictionary/indication</u></p> <p>Indicate, Merriam-Webster.com, <u>http://www.merriam-webster.com/dictionary/indicate</u></p>
'211 Patent		
indicate/indicating . . . whether the domain name service system supports establishing a secure	display/displaying a visible message or signal that informs the user whether the domain name service system supports establishing a secure communication link	'211 Patent, figs. 33-35, cols. 6:17-7:37, 48:55-52:67, claims 1, 17, 24, 36, 41, 48, 60, office actions and amendments of March 19, 2010, June 28, 2010, August 6, 2010, October 21, 2010, December 22, 2010.

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Claim Term	Defendants' Claim Construction	Intrinsic and Extrinsic Support
communication link		<p>'504 Patent, office action and amendments of March 21, 2007 and July 11, 2007.</p> <p>Indication, Merriam-Webster.com, <u>http://www.merriam-webster.com/dictionary/indication</u></p> <p>Indicate, Merriam-Webster.com, <u>http://www.merriam-webster.com/dictionary/indicate</u></p>
'759 Patent		
cryptographic information	information that is required in order to encode/decode or encrypt to ensure secrecy	<p>'759 Patent, cols. 1:49-56, 6:37-49, 44:41-50.</p> <p>Claim Construction Opinion from the Microsoft Case (6:07-cv-80, D.I. 246) at 26-28.</p>
enabling a secure communication mode of communication	using an input device to select a secure communication mode of communication	'759 Patent, fig. 34, cols. 6:44-51, 50:23-30, 51:34-44.